

that the NFL Network lacks the financial strength to constrain pricing of Comcast-affiliated sports networks.

77. Because the NFL Network is fully owned and operated by the NFL,⁹¹ the assessment of the NFL Network's viability and financial strength should examine the effect of the NFL Network's business on profitability of the NFL as a whole.⁹² When considering the effect of the NFL Network's contribution to the profits of the NFL, there is reason to believe that the network's operations are quite profitable for the NFL. The NFL Network generates considerable revenue.⁹³ In October 2006, a spokesman for the NFL Network stated that, "The NFL Network is profitable already."⁹⁴ More recently, the Chair of the NFL Broadcast Committee highlighted the network's profitability.⁹⁵ Furthermore, because the NFL owns all NFL-related game rights and trademarks,⁹⁶ it does not incur additional license costs as a result of the NFL Network's carriage of live regular-season NFL games.⁹⁷

78. Dr. Singer argues that economic literature on raising rivals' costs supports his assertion that limiting Comcast's carriage of the NFL Network to the Sports Tier has harmed competition among national cable sports networks.⁹⁸ However, Dr. Singer's argument misapplies economic theory. The economic literature on raising rival's costs

⁹¹ See Comcast Ex. 169. See also, Comcast Ex. 67 at 30.

⁹² Thus, if the NFL Network were making a positive contribution to the NFL's profits, the NFL would not rationally terminate the NFL Network's operations even if the NFL Network by itself generated accounting losses.

⁹³ According to SNL Kagan 2008 Economics of Basic Cable, the NFL Network earned revenues in excess of [REDACTED] in 2007.

⁹⁴ Comcast Ex. 120.

⁹⁵ Comcast Ex. 121.

⁹⁶ See Comcast Ex. 170.

⁹⁷ Comcast Ex. 67 at 233-234.

⁹⁸ Comcast Ex. 85 ¶¶ 35-36; Comcast Ex. 65 at 73:5-74:4.

that Dr. Singer relies on in his analysis shows how firms can harm competition through strategies to raise a rival's *marginal* or incremental costs of output, that is, costs of producing an *additional* unit of output.⁹⁹ However, Dr. Singer does not demonstrate that the NFL Network would face any increases in incremental costs as result of Comcast's carriage of the NFL Network on the Sports Tier. Dr Singer asserts that the NFL Network's incremental costs increased because the "NFL Network had to incur additional and incremental sales expenses as a result of getting its customers to see its content that they wouldn't have had to incur in a but-for world in which Comcast carried it on a more expanded tier."¹⁰⁰

79. Dr. Singer's application of raising rival's cost theory is misguided. There is no basis for claiming that the NFL Network "had" to incur additional sales expense. The correct application of the raising rivals' cost framework should examine the marginal cost of promotional activity – not the total increase in such expenditure (assuming for the sake of argument that this is true). The marginal cost of promotional activity is the NFL Network's incremental promotional cost of acquiring an additional subscriber. There is no reason to assume that a reduction in the NFL Network's distribution would increase its

⁹⁹ An article by Thomas Krattenmaker and Steven Salop that Dr. Singer cites in his Report states: "Because established firms' prices in the short run depend on short run incremental costs, then only those exclusionary rights that increase short run incremental costs will lead to immediate pressure on price. In contrast, exclusionary rights that only raise established rivals' fixed costs will not give the purchaser the ability to raise its price unless the cost increases are high enough to induce some rivals to exit the market in the long run or to forego expansion in a growing market." Comcast Ex. 171 at 209-293 (Thomas Krattenmaker and Steven Salop (1986) "Anticompetitive Exclusion: Raising Rivals' Costs to Achieve Power over Price," *Yale Law Journal* 96(2) ("Krattenmaker/Salop")); See also Comcast Ex. 172 at 267-271 (Steven Salop and David Scheffman (1983) "Raising Rivals' Costs," *American Economic Review* 73(2)).

¹⁰⁰ See Comcast Ex. 65 at 101:5-10.

incremental promotional costs.¹⁰¹ In fact, a *decline* in incremental promotional costs would likely result in *higher* promotional expenditures as the network may try to take advantage of greater effectiveness of promotional spending.¹⁰² Thus, in focusing on any increase in promotional spending by the NFL Network, Dr. Singer appears to have confused *total* promotional spending with *incremental* promotional cost.

80. The idea behind raising rivals' costs models is that when a firm's *incremental* costs increase, the firm will lose some incentive to compete for additional business. In the case of promotional costs, if there is a large increase in a firm's incremental promotional costs, the firm may be less willing to promote its products to compete for incremental customers, which may, in turn, reduce the firm's ability to constrain competitors' pricing. This is quite different from saying that the firm "had" to incur promotional expenditures to attempt to win back lost customers. Thus, Dr. Singer's assertion about incremental promotional costs clearly misapplies the raising rivals' costs model.¹⁰³

81. Moreover, Dr. Singer's assertion about incremental promotional expenditures applies only to Comcast subscribers, and there is no basis for assuming that the NFL Network would face higher incremental promotional costs in competing for subscribers of other MVPDs.¹⁰⁴ In fact, Dr. Singer suggests that the NFL Network

¹⁰¹ That is, there is no reason to assume that the NFL Network's promotional costs needed to acquire 1,000 additional subscribers would be any higher if it had 32 million subscribers than if it had 38 million subscribers.

¹⁰² For example, if the promotional costs of acquiring an additional subscriber would decline from \$500 to \$400, the network may actually increase its promotional spend since every dollar of promotional activity would become more effective.

¹⁰³ See Comcast Ex. 65 at 102:4-103:11.

¹⁰⁴ Carriage costs facing other MVPDs are the focus of Dr. Singer's harm to MVPD competition assertion. See Comcast Ex. 85 ¶ 54.

increased its promotional expenditures for DIRECTV and Dish Network as a result Comcast's decision to carry the NFL Network on the Sports Tier. If anything, such promotional activity by the NFL Network would make it more competitive – not less – with respect to carriage decisions by DIRECTV and Dish Network.

82. Further, Dr. Singer lacks *any* factual or analytical basis for claiming that the NFL Network's incremental promotional costs have increased as a result of Comcast's decision to carry the NFL Network on the Sports Tier.¹⁰⁵ The Krattenmaker and Salop article on raising rivals' costs that Dr. Singer cites numerous times in his Report states that a harm to consumer welfare (under the raising rivals' costs theory) is unlikely unless an increase in incremental costs has a significant effect on total costs of actual or potential competitors.¹⁰⁶ Dr. Singer appears to be in agreement with this view.¹⁰⁷ Yet, Dr. Singer performs no analysis whatsoever to determine whether any increase in the NFL Network's incremental costs was significant relative to the network's total costs.

83. Therefore, for all the reasons discussed above, there is no basis for Dr. Singer's claim that the NFL Network faced higher incremental promotional costs as a result of Comcast's decision to carry the NFL Network on the Sports Tier.

¹⁰⁵ See Comcast Ex. 65 at 100:17-111:20.

¹⁰⁶ Krattenmaker and Salop state that "[t]he increase in the input's price may be so insignificant that it has little effect on the total costs of actual or potential competitors. This result can occur if the input price increase is small or if the input from which rivals are excluded accounts for only a small fraction of their total costs. Consumer welfare is unlikely to be affected by a strategy that raises the price of a key input from \$10 to \$10.01 or by one that doubles the total cost of one of a firm's inputs from \$1 to \$2 when other necessary inputs cost \$1,000 per unit of output produced." Comcast Ex. 171 at 242.

¹⁰⁷ See Comcast Ex. 65 at 99:4-100:16.

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84. Dr. Singer also claims that in a “two-sided market” a “decline in advertising revenue” is “tantamount to an increase in the marginal cost of serving ... viewers.”¹⁰⁸ Again, Dr. Singer appears to be misapplying the raising-rivals’-cost economics literature. A decline in total advertising revenue does not imply an increase in effective marginal cost or reduced ability to compete for additional carriage.¹⁰⁹ Moreover, Dr. Singer provides absolutely no basis for his assertion that the NFL Network experienced a decline in advertising revenue as a result of Comcast’s decision to carry the NFL Network on the Sports Tier.¹¹⁰ In fact, the available evidence indicates that the NFL Network’s total advertising revenue and average advertising rate increased between 2006

¹⁰⁸ See Comcast Ex. 65 at 101:15-22.

¹⁰⁹ Even if the network experienced a decline in advertising rates, there is no reason assume the reduction in advertising rates would have any effect on the network’s ability to compete against other networks. For example, according to SNL Kagan, in 2007, the NFL Network’s average license revenue was [REDACTED] per subscriber per month and the average net advertising revenue was [REDACTED] per subscriber per month. (See Comcast Ex. 153, SNL Kagan 2008 Economics of Basic Cable.) Even if the NFL Network experience a 10 percent decline in advertising rates (and the data do not indicate any decline in the NFL Network’s advertising rates at the time that Comcast began carrying the network on the Sports Tier), the average advertising revenue would decline by [REDACTED] per subscriber per month or roughly [REDACTED] of total revenue per subscriber. Thus, even if advertising rates declined by [REDACTED], the effect on total revenue per subscriber would be insignificant.

¹¹⁰ Dr. Singer claimed in the early part of his deposition to have the data on the NFL Network’s “decline in advertising revenue ... down to a penny.” See Comcast Ex. 65 at 101:15-17. But when asked about changes in the NFL Network’s advertising revenue between 2006 (when Comcast carried the NFL Network on D2) and 2007 (when Comcast began carrying the NFL Network on the Sports Tier), Dr. Singer offered no view as to the advertising revenue actually declined. See Comcast Ex. 65 at 253:4-9 (“Q. Do you know whether there was an increase in the NFL Network’s advertising revenue between 2006 and 2007? A. I have looked at that data before, but I can’t tell you right now if there was an increase or a decrease”).

(when Comcast carried the NFL Network on D2) and 2007 (when Comcast began carrying the NFL Network on the Sports Tier).¹¹¹

85. In addition, a reduction in the NFL Network's distribution would have no effect on the network's cost of serving an additional subscriber. The NFL Network's cost of serving an additional subscriber would have remained negligible even after any reduction in distribution. Dr. Singer suggests that the decision by Comcast to carry the NFL Network on the Sports Tier caused a reduction in advertising revenue, which is tantamount to an increase in costs, given the two-sided nature of the market. If we piece these two statements together, Dr. Singer states that (a) changes in distribution have no effect on the *marginal* cost of supplying sports programming¹¹² and (b) changes in distribution change marginal costs by changing the amount of advertising revenue received by the programmer. But Dr. Singer's Report does not appreciate that if the NFL Network just lowered its price or changed its other carriage terms, it could *increase* its distribution, which would – in his model – lower the NFL Network's effective marginal costs. The following testimony from Dr. Singer suggests that Dr. Singer agrees with my perspective that the NFL Network can increase its distribution by lowering its price: "I think there is potentially, according to economic theory, a happier state of the world out there for the NFL in which they have greater penetration, greater advertising revenues at a lower price. That's what economic theory would predict."¹¹³ Therefore, it would seem to me that Dr. Singer cannot blame Comcast for the NFL Network's decision to set its

¹¹¹ See Comcast Ex. 161. According to SNL Kagan, the NFL Network's average advertising rate (as measured in 24 hour CPM) increased between 2006 and 2007 by [REDACTED] from [REDACTED]. See Comcast Ex. 153.

Comcast Ex. 85 ¶ 39.

¹¹³ See Comcast Ex. 65 at 192:9-14.

own prices and carriage terms in such a way as to limit its distribution among the largest cable companies, as well as other MVPDs.

86. Dr. Singer's claims regarding the benefits of widespread distribution are contradicted by the NFL's decision to distribute the NFL Sunday Ticket exclusively through DIRECTV. Exclusive distribution of the NFL Sunday Ticket is indicative of the NFL's view that, for games that are already carried by local affiliates of broadcast networks, the greatest additional value can be obtained from exclusive distribution on a premium service, rather than through wide distribution. At a minimum, to explain why Comcast's carriage of the NFL Network on the Sports Tier is not plausible, Dr. Singer must reconcile his claims with the NFL's decision to distribute the NFL Sunday Ticket on an exclusive basis. He must also reconcile his arguments with the fact that the NFL claims that the NFL Network has been one of the fastest growing cable networks in the history of the industry.¹¹⁴ Dr. Singer's Report addresses neither of these issues.

D. Barriers to entry

87. Further, under standard economic theory, Comcast could plausibly have an incentive to discriminate against NFL Network in favor of its affiliated networks the Golf Channel or Versus only if there were significant barriers to entry, expansion, or programming content repositioning for national sports cable networks. Absent such barriers, any diminution in competition among cable networks in the provision of particular sports content would result in new network launches, expansion in carriage of

¹¹⁴ According to the NFL Network, "NFL Network in 24 months reached subscriber totals on par with other successful networks in their fifth year. (Ex.: the Golf Channel had 26.1 million subscribers after its 5th year; ESPN had 29.3; MTV had 27.8; TBS had 19.6) Counting all cable channels launched, the average subscriber numbers at the end of five years is 30.3 million. NFL Network reached this number in less than two years." See Comcast Ex. 173.

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existing networks, or a change in the sports programming content (*i.e.*, repositioning) of existing national networks that would restore any lost competition.

88. Neither the NFL nor Dr. Singer has established a presence of significant barriers to entry, expansion, or repositioning. To demonstrate that there is any potential for loss of competition among sports cable networks, the NFL or its experts would have to show that no sports league, other major sports content provider (including ESPN, Fox, CBS, etc.), or independent national network could enter or expand in response to any hypothesized anticompetitive rise in programming or advertising prices charged by the Golf Channel or Versus, even though a number of such entities have launched national sports cable networks in recent years. For example, Table E below lists national sports cable networks launched since 2003.

Table E.
Networks Launched since January 1, 2003

Network	Launch Date
NHL Network	October, 2007
Big Ten Network	August, 2007
Mountainwest Sports Network *	September, 2006
ESPN U	March, 2005
Fox Soccer	February, 2005
NFL Network	November, 2003
Fuel	July, 2003
The Tennis Channel	May, 2003
CBS College Sports Network (CSTV)	April, 2003
GOL TV	February, 2003
HorseRacing TV	January, 2003

Sources:

2008 SNL Kagan Economics of Basic Cable Networks

Network Websites

Magna Entertainment 2004 10-K

* Mountainwest Sports Network partially owned by Comcast

89. Therefore, there is no valid basis for concluding that Comcast has the incentive to restrain the NFL Network's ability to compete against other networks.

E. Dr. Singer applies an inappropriate standard for assessing the effect of carriage on ability to compete

90. In his Report, Dr. Singer proposes a standard for judging business conduct under which any decision by a vertically integrated MVPD (*i.e.*, an MVPD affiliated with a programming network) not to carry an unaffiliated network on highly penetrated tiers would be condemned as "anticompetitive discrimination."¹¹⁵ Under Dr. Singer's framework, a decision by "a vertically integrated cable operator" not to carry "a rival national sports programming network on its highly penetrated tiers ... may (1) deny upstream rival programmers access to the most efficient means of selling advertising and providing content to viewers and/or (2) prevent upstream programming rivals from achieving critical economies of scale."¹¹⁶ Dr. Singer then argues that because "(1) scale economies exist in the production of national sports programming and (2) highly penetrated tiers are the most efficient distribution channels for engaging in those two activities" under Dr. Singer's "theory of anticompetitive harm" the effects of a decision to not carry independent programming because of cost considerations always harms competition.¹¹⁷

91. Because scale economies exist in the production of all video programming, Dr. Singer's theory of anticompetitive harm would condemn as anticompetitive any decision by a vertically integrated MVPD not to carry an unaffiliated

¹¹⁵ Comcast Ex. 85 ¶ 32.

¹¹⁶ *Id.*

¹¹⁷ *Id.*

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network on the same tier as its affiliated programming (regardless of the cost of the unaffiliated programming). Dr. Singer's standard is then essentially a *per se* prohibition against any denial of carriage by an MVPD on at least the same tier as its affiliated programming. Because under Dr. Singer's *per se* rule, vertically integrated MVPDs would be required to carry unaffiliated networks, regardless of the factors that might justify the denial of carriage (such as the network's license fee or the demand for the network's programming), Dr. Singer's proposed standard would lead to higher prices and expanded basic packages bloated with an excessive amount of programming. Alternatively, Dr. Singer's standard would impede vertical integration, which would reduce new network launches and harm diversity, a goal of the Commission.

92. Moreover, Dr. Singer's "efficiency" justification in compelling carriage of a network is actually not consistent with efficiency. Under Dr. Singer's framework, if an affiliated programming network were carried on analog basic or analog expanded basic, all networks would be required to be distributed on that same tier because it would provide the most "efficient" means for the network to reach viewers. But this would be impossible because the number of cable programming networks exceeds the channel capacity of a typical analog system. In fact, Dr. Singer's framework would lead to an inefficient distribution of video programming because it would undermine critical market mechanisms for pricing and placement of networks on MVPD tiers. MVPDs evaluate network carriage based on, among other things, license fees, carriage terms, and the demand for the network's programming, and such market-based mechanisms are essential for achieving an efficient distribution of video programming. Dr. Singer's standard would destroy this mechanism.

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93. Moreover, Dr. Singer's standard for judging business conduct is *not* consistent with the Commission's "unreasonably restrain the ability to compete fairly" standard. Dr. Singer argues that a decision by an MVPD to deny carriage to a network would increase the network's average cost per viewer.¹¹⁸ I agree with this assertion because, generally, there are scale economies in network operation. However, the fallacy in Dr. Singer's logic is in concluding that increasing a network's average cost per viewer necessarily leads to a diminished ability to compete. Just because a network earns less profit than some desired hypothetical amount (that would occur under a wider distribution of the network) does not mean that the network's ability to restrain competitors' pricing would be diminished. For example, the network's ability to compete for new carriage contracts would not necessarily be affected the network's total number of subscribers. Furthermore, to the extent that additional distribution is a source of competitive advantage to the NFL Network, the NFL Network can gain additional distribution by reducing its license fee and/or improving its carriage terms. There are approximately 73 million MVPD subscribers in the U.S. that are not served by Comcast,¹¹⁹ and of these about 43 million do not receive the NFL Network.¹²⁰ There is no reason that I am aware of that would preclude the NFL Network from growing its distribution by offering better carriage terms to MVPDs. Whether or not to improve its carriage terms to grow distribution is part of the strategic calculation that considers the benefit of greater distribution against the cost of foregone license revenue. However, the

¹¹⁸ Comcast Ex. 85 ¶ 32.

¹¹⁹ Since Comcast currently serves about 24.4 million subscribers and there are 97.7 million MVPD subscribers nationwide, there are 73.3 million non-Comcast MVPD subscribers. See Comcast Ex. 166 ; Comcast Ex. 153.

¹²⁰ There are approximately [REDACTED] NFL Network subscribers of which about [REDACTED] are also Comcast subscribers. Comcast Ex. 161.

assertion that the NFL Network's ability to compete against other networks would be enhanced with greater distribution is belied by the network's relatively large average license fee.

F. Dr. Singer misapplies economic literature

94. Dr. Singer claims that his conclusions regarding harm to consumers and a diminution in the NFL Network's ability to compete follow directly from the application of the economic theory literature on foreclosure and raising rivals' costs. Dr. Singer argues that the economic literature obviates any need to conduct an empirical analysis: he claims that the economic literature "presumes" harm to competition if certain market conditions are satisfied,¹²¹ such as the presence in scale economies in the production of video programming.¹²²

95. However, Dr. Singer misapplies the economic literature in reaching his conclusions. The economic models cited by Dr. Singer do not "presume" that harm to competition. The models cited by Dr. Singer provide only a *theoretical* framework for conducting further *empirical* analysis. Thus, in stating the economic literature presumes an "anticompetitive impact,"¹²³ Dr. Singer is misapplying economic literature.

96. The excerpts from the economic literature that Dr. Singer relies on for his analysis clearly contradict Dr. Singer's assertion regarding the presumption of

¹²¹ See Comcast Ex. 65 at 97:15-20 ("If you can show that these models of vertical foreclosure, exclusionary conduct *apply* here, and if you can show that the conditions that economists are interested in are satisfied, then you can *presume* that there has been an anticompetitive impact." emphasis added); at 97:23 -98:5 ("Q. And what does it mean that you can presume there has been an anticompetitive impact? A. It means that to the extent that this model is capturing the competition in the real world in this industry, that you can presume that prices have been inflated or that competition has been undermined as a result of the conduct.").

¹²² Comcast Ex. 65 at 97:15-20.

¹²³ See Comcast Ex. 65 at 74:5-75:16.

anticompetitive impact. The Whinston article,¹²⁴ which Dr. Singer cited in his Report and testified that he relied upon, states that:

“[W]hen tying does lead to exclusion of rivals, the welfare effects both for consumers and for aggregate efficiency are in general *ambiguous*.”¹²⁵

“Even in the simple models considered here, which ignore a number of other possible motivations for the practice [of tying], the impact of this exclusion on welfare is *uncertain*. This fact, combined with the difficulty of sorting out the leverage-based instances of tying from other cases, makes the specification of a practical legal standard extremely difficult.”¹²⁶

97. The Carlton article,¹²⁷ which Dr. Singer cited in his Report and [REDACTED] that he relies upon, states that:

“The zeal with which economists foist these theories [of exclusionary conduct and refusals to deal] on antitrust practitioners must not obscure two key facts. First, the harm to a rival is not a harm to competition. Empirically documenting a harm to competition from various exclusionary conduct is usually quite difficult and is not necessarily an implication of the theories. Economic theorizing about possible harm to competition has far outpaced empirical verification.”¹²⁸

“The key issue is whether one can distinguish when these theories [of exclusionary conduct and refusals to deal] imply a harm to competition as distinct from a harm to a rival. It is possible to show that, in many of [these] models, banning the exclusionary conduct can sometimes improve competition in the sense that consumers are better off. However, it is also important to recognize that, since these models have scale effects (or network effects), it is possible to show that the exclusionary conduct can sometimes benefit consumers. Moreover, there are well-known

¹²⁴ Comcast Ex. 164 (Whinston).

¹²⁵ *Id.* at 839 (Emphasis added).

¹²⁶ *Id.* at 856 (Emphasis added).

¹²⁷ Comcast Ex. 163 at 659-683 (Dennis Carlton (2001) “A General Analysis of Exclusionary Conduct and Refusal to Deal--Why Aspen and Kodak Are Misguided,” *Antitrust Law Journal* 68).

¹²⁸ *Id.* at 660.

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procompetitive effects from refusals to deal (in addition to scale effects).”¹²⁹

“Any antitrust attack on an explicit or implicit refusal to deal must recognize this difficulty of identifying by theory alone a competitive harm, and instead must turn to a quantitative analysis, which may be difficult to perform, before condemning the practice in any specific case.”¹³⁰

“In summary, exclusionary conduct should not be attacked absent a coherent theory explaining some mechanism of harm. That means that, in the absence of some sort of significant scale effects, there is unlikely to be a basis for attack based on the theories reviewed here. But, even where theory suggests the possibility of competitive harm, the difficulty in identifying such harm and in distinguishing a harm to competition from a harm to competitors suggests caution. At a minimum, a plaintiff should be required to show a significant harm to competition and should not be allowed to prove only that there are no efficiencies from the exclusionary conduct.”¹³¹

“New economic models have greatly aided the understanding of strategic behavior involving refusals to deal and related practices. These models often have ambiguous welfare predictions. Therefore, before condemning a practice, it is incumbent on the economist to adduce evidence to establish that there is indeed likely to be a significant harm to competition from the practice. Without such evidence, the expansion of antitrust into creating a duty to deal will wind up harming consumer welfare.”¹³²

The Whinston and Carlton articles clearly contradict Dr. Singer’s assertion that Whinston and Carlton presume harm to consumers if certain market conditions are satisfied. The Whinston and Carlton articles explain that even if exclusionary conduct has occurred, one cannot presume harm to consumers. In fact, Whinston and Carlton assert that exclusionary conduct can actually improve consumer welfare. The articles also make it clear that demonstrating harm to competition requires an empirical investigation of the

¹²⁹ *Id.* at 671.

¹³⁰ *Id.* at 672.

¹³¹ *Id.* at 675.

¹³² *Id.* at 683.

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conduct in question. That is, it is insufficient to establish harm to competition simply by invoking economic models, as Dr. Singer does in reaching his conclusions of harm.

98. Moreover, the economic literature that Dr. Singer relies on in his analysis states that harm to competition can *only* occur if certain necessary conditions are satisfied.¹³³ These conditions include: the existence of significant entry barriers and concentration in markets at issue; no significant cost savings from the conduct at issue; and a significant rise in rivals' marginal cost of output from the conduct at issue.¹³⁴ Dr. Singer has not established the existence of these necessary conditions in his application of the economic literature.¹³⁵

99. Dr. Singer also misapplies economic literature in claiming that Comcast's carriage of the NFL Network may harm competition in perfectly competitive markets.¹³⁶ Based on this claim, Dr. Singer asserts that demonstrating harm to competition in advertising and other markets in which the NFL Network competes does not require the analysis of competition in such markets.¹³⁷ However, the economic literature that Dr. Singer relies upon in his analysis contradicts Dr. Singer's assertion regarding the

¹³³ Comcast Ex. 171 at 209-293 (Krattenmaker/Salop).

¹³⁴ *Id.* at 242, 259-60, 277-80.

¹³⁵ See Comcast Ex. 65 at 75:22-76:11; 96:7-122:15; 289:5-298:13.

¹³⁶ See Comcast Ex. 65 at 96:7-97:2 ("Q. Do you make any assumption about whether or not the advertising market in which the NFL Network participates is competitive? A. No, I don't, but I should point out that the models typically, if you think about a monopoly leveraging model, they typically begin with the presumption that the tied market or the B market is perfectly competitively supplied and the A market is monopolized. So this notion is if B is somehow perfectly competitively supplied you can't have an anticompetitive impact is just false. In fact, most of the models begin with that presumption. Q. And which models in particular are you referring to? A. Oh, Carlton has a model. Nalebuff has a model. Winston wrote the seminal article in I believe the beginning of 1989 beginning with the assumption that the tied market was perfectly competitively supplied.")

¹³⁷ See Comcast Ex. 65 96:7-19; 97:3-99:3; 292:14-294:10.

potential for harm in competitive markets.¹³⁸ Thus, Dr. Singer lacks the necessary basis to claim any harm to competition from Comcast's carriage of the NFL Network.

100. As the foregoing discussion shows, Dr. Singer has not established a reliable basis for his conclusion of harm to competition.

IV. EFFECT ON COMPETITION

A. *Competition for viewers*

101. As I discuss in the previous section, there is no valid basis for concluding that Comcast's carriage of the NFL Network resulted in diminished competition among national cable sports networks or resulted in harm to consumers from any diminution of competition. However, Dr. Singer also claims that Comcast's decision to carry the NFL Network only on the Sports Tier has directly harmed consumers.

102. Dr. Singer claims that consumers suffered harm because Comcast subscribers interested in the NFL Network had to purchase Comcast's Sports Tier rather than receiving the NFL Network on a more highly penetrated tier. An assessment of whether Comcast's decision to carry the NFL Network on the Sports Tier has directly resulted in a loss of consumer welfare must compare consumer welfare under the current

¹³⁸ For example, the Whinston article that Dr. Singer referred to in his deposition and cites in his Report states that: "In an important sense, however, the existing literature does not really address the central concern inherent in the leverage theory, namely, that tying may be an effective (and profitable) means for a monopolist to affect the market structure of the tied good market (i.e., "monopolize" it) by making continued operation unprofitable for tied good rivals. The reason lies in the literature's pervasive (and sometimes implicit) assumption that the tied good market has a competitive, constant returns-to-scale structure. With this assumption, the use of leverage to affect the market structure of the tied good market is actually *impossible*. Thus, in contrast to a concern over the effects of tying on market structure, the existing literature's focus is on a demand-side notion of 'leverage': the idea that, taking the prices charged by tied good competitors as given, a firm might be able to extract greater profits from consumers by tying." Comcast Ex. 164 at 838 (emphasis added) (footnotes omitted).

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arrangement with one under which Comcast would have included the NFL Network on a more highly penetrated tier. Dr. Singer has not performed such an analysis.

103. In his Report, Dr. Singer's assessment of consumer harm is one-sided; he focuses only on those consumers with a relatively high interest in the NFL Network.¹³⁹ However, distributing the NFL Network on a more highly penetrated tier would have likely resulted in higher prices, and, therefore, would have reduced the welfare for the consumers with little interest in the NFL Network.¹⁴⁰ In his Report, Dr. Singer argues that prices would not have increased because "Comcast did *not* reduce its D2 tier price when it removed NFL Network from its D2 tier."¹⁴¹ But Dr. Singer's argument is belied by his own arguments elsewhere in his report and the literature that shows some degree of pass-through of input costs to consumer prices in this sector.¹⁴² Later in his report, Dr. Singer states that if the NFL Network is a weaker competitor, producers of rival sports programming will be able to raise prices, which will result in viewers paying more "to watch rival sports programming (including that owned by Comcast)."¹⁴³ Dr. Singer cannot have it both ways. He cannot argue in the same report that (a) when Comcast's input prices go up, it does not pass-through those costs to consumers, and (b) when sports

¹³⁹ Dr. Singer wrote that "Moving NFL Network to a premium tier harmed any Comcast subscriber interested in receiving NFL Network." Comcast Ex. 85 ¶ 52. That is not factually correct. If a consumer values the NFL Network at \$0.05 per month and Comcast held down the increase in D2 fees by any amount greater than that valuation because the NFL Network was moved to the Sports Tier, the consumer is better off. Dr. Singer's analysis ignores all of these viewers.

¹⁴⁰ To the extent that Comcast has a capacity constraint, especially on the analog expanded basic tier, the addition of the NFL Network would force Comcast to remove another programming channel. Thus, that channel removal could be another source of consumer harm that would need to be considered.

¹⁴¹ Comcast Ex. 85 ¶ 31.

¹⁴² See Comcast Ex. 65 at 55:5-63:15.

¹⁴³ Comcast Ex. 65 ¶¶ 51, 54.

programming costs increase, MVPDs, including Comcast, pass those costs on to consumers.¹⁴⁴ The academic literature does not support Dr. Singer's no-cost pass-through assertions: A study of cable prices by Ford and Jackson showed that increased programming costs are passed through to MVPD subscribers at a rate of about 50 percent.¹⁴⁵ In that case, some Comcast subscribers are better off with the NFL Network on its Sports Tier and not on a more highly penetrated tier.

104. Moreover, Comcast's internal documents show that, in 2006, Comcast did not pass on to customers the NFL Network's 55 cent per subscriber per month surcharge for the eight live regular-season NFL games because Comcast anticipated moving the NFL Network to the Sports Tier in 2007.¹⁴⁶ Because Comcast did not increase its prices in 2006 when NFL Network began charging the 55 cent per subscriber per month surcharge, not lowering the D2 tier prices after placing the NFL Network on the Sports Tier is consistent with economic logic. In addition, it makes economic sense not to change subscription prices immediately after changes in input prices because there are often "switching" or "menu" costs associated with such price changes. Economic studies show that prices tend to be "sticky,"¹⁴⁷ and therefore, input cost changes would not be instantly passed through to consumers.¹⁴⁸ However, basic economic theory predicts that

¹⁴⁴ Dr. Singer also writes that, "Economic theory dictates that higher variable costs translate into higher prices in the short run." Comcast Ex. 85 ¶ 62.

¹⁴⁵ Comcast Ex. 174 at 513-514 (George S. Ford and John D. Jackson (1997), "Horizontal Concentration and Vertical Integration in the Cable Television Industry," *Review of Industrial Organization* 12).

¹⁴⁶ Comcast Ex. 175 at 3.

¹⁴⁷ See Comcast Ex. 176 at 947-985 (Mark Bils and Peter J. Klenow (2004). "Some Evidence on the Importance of Sticky Prices." *Journal of Political Economy* 112(5)).

¹⁴⁸ Just like one would not expect the menu prices in a restaurant to be adjusted daily based on changes in the price of beef.

over the long term, changes in input costs will be reflected in retail price changes.¹⁴⁹ Therefore, permanent carriage of the NFL Network on highly penetrated tiers will almost certainly result in higher prices for the tiers' subscribers.

105. Dr. Singer's analysis of harm to consumers *presumes* that programming costs from the carriage of the NFL Network would not be passed on to consumers.¹⁵⁰ However, Dr. Singer has conceded that some such costs may be passed on to consumers, and that he did not analyze the effect on consumer welfare if the costs would have been passed on to the consumers.¹⁵¹ Ignoring the potential consumer welfare losses from carrying the NFL Network on a more highly penetrated tier yields a biased assessment of the welfare effects of Comcast's decision to place the NFL Network on the Sports Tier.¹⁵² Given that Comcast's decision to put the NFL Network on a Sports Tier creates significant benefits for Comcast subscribers who do not value the NFL Network, Dr. Singer has not provided any valid basis for concluding that overall consumer welfare is harmed in any way from Comcast's carriage of the NFL Network on its Sports Tier.

B. *Competition for advertisers*

106. There is also no valid basis for concluding that advertisers have been harmed in any way from Comcast's carriage of the NFL Network on its Sports Tier.

¹⁴⁹ See Comcast Ex. 177 at 556 (Dennis Carlton and Jeffrey Perloff, *Modern Industrial Organization* Third Edition).

¹⁵⁰ See Comcast Ex. 65 at 69:16-18 ("The analysis that I have done presumed that Comcast would not increase the price [of its highly penetrated tiers as a result of carriage of the NFL Network on those tiers].")

¹⁵¹ See Comcast Ex. 65 at 59:13-69:18.

¹⁵² In addition, with the NFL Network on a Sports Tier, it may be possible for consumers to choose to purchase the Sports Tier package when the NFL Network offers live regular-season NFL games (*i.e.*, for roughly two-three months) and not purchase it when the NFL Network does not offer live NFL content. If the NFL Network were part of a more highly penetrated tier, consumers would pay for the NFL Network programming throughout the year, a point emphasized by Bright House on its website. See Comcast Ex. 141.

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Advertisers have a wide range of options for reaching viewers of sports programming, whether through sports cable networks, general interest cable networks, broadcast networks, the Internet (including NFL.com), radio, print media, in-stadium advertising, and other channels. There is no plausible basis for concluding that there exists an identifiable group of viewers that could only be reached through either Versus or the Golf Channel and the NFL Network. There is also no plausible basis for concluding that the advertising rates charged by Versus or the Golf Channel are constrained by the NFL Network and no other cable network or other media. Therefore, there is no valid basis for concluding that Comcast's carriage of the NFL Network harmed advertisers either through a reduction in competition among cable networks or through restricting their ability to reach viewers with advertising content.

C. Competition for carriage of sports programming

107. Dr. Singer also claims that Comcast's conduct has harmed non-NFL content owners because the NFL Network does not have the reach to bid on particular packages of games sublicensed by the Fox Sports Network. But Dr. Singer's claim does not provide the type of evidence necessary to show harm to non-NFL content owners. First, he does not provide any evidence that the NFL Network's reach with carriage on Comcast would have been sufficient to qualify the NFL Network to bid for the sublicense. Second, he does not provide any evidence that the NFL Network's participation in the bidding process would have resulted in an alternative price for the content. An example can show how Dr. Singer's evidence is insufficient. Let us suppose that Versus were bidding against ESPN/ABC, Fox, and the NFL Network. Let us further suppose that ESPN/ABC valued the Pac-10 rights at \$10.5 million, Fox valued them at \$12 million, Versus valued them at \$11 million, and the NFL Network valued them at

\$10 million. Since Fox values the programming highest, Fox would likely win the bidding. Versus would drop out of the running at \$11 million and Fox could win with a bid of just over \$11 million. Whether or not the NFL Network was a bidder in this auction does not change the auction price since the NFL Network had the lowest valuation. To establish some basis for his conclusions, Dr. Singer cannot just assert claims about “higher prices for [non-NFL content owners];” he must present some reasonable evidence that the NFL Network’s participation in the bidding process would have resulted in a higher price for the content owner.

108. Moreover, Dr. Singer does not present any analysis to show that the NFL Network’s level of distribution will have any effect on *future* competition for the carriage of sports programming. Nor has Dr. Singer shown that any such effect on competition would in any way benefit the Golf Channel or Versus. As I discuss earlier, there are numerous sports-oriented cable networks, as well as general cable networks with sports programming, that would be in a position to bid for new sports content carriage rights. Dr. Singer’s analysis does not show that the presence of the NFL Network, even if it had additional distribution, is necessary for robust competition for the carriage of sports programming.

V. DR. SINGER’S “FAIR MARKET VALUE” ANALYSIS

A. *Dr. Singer’s “fair market value” analysis is based on inappropriate benchmark affiliation agreements.*

109. Dr. Singer’s report describes his analysis for estimating what he calls the “fair market value of carriage of the NFL Network Programming on Comcast’s Expanded Basic Tier.”¹⁵³ It is important to note that the term “fair market value” is somewhat

¹⁵³ Comcast Ex. 85 ¶ 63.

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misleading in this case. Fair market value of an asset is an estimate of what a willing buyer would pay for the asset to a willing seller, where both parties have reasonable knowledge of asset attributes. A more accurate description of Dr. Singer's analysis (or, at least, what it aims to be) is estimating the price that Comcast would have paid for carriage of the NFL Network on highly penetrated tiers based on what other MVPDs in similar market circumstances and having similar attributes have paid for the carriage of the NFL Network on highly penetrated tiers. Henceforth, I will refer to such an estimate as the "Comcast price prediction." However, Dr. Singer does not succeed in producing a reliable estimate of the Comcast price prediction. Indeed, there is no other way to describe his analysis other than to conclude that it is fundamentally flawed and cannot be relied upon.

110. Dr. Singer states that he is seeking to find a price "consistent with the rates paid by other MVPDs that carry NFL Network on a highly penetrated tier."¹⁵⁴ But Dr. Singer analysis does not do that. His Comcast price prediction estimates are based on a sample of affiliation agreements with only *nine* MVPDs. The MVPDs in Dr. Singer's sample include: (1) DIRECTV; (2) Dish Network; (3) Verizon FiOS; (4) AT&T U-verse; (5) RCN; (6) Cox; (7) Insight; (8) Blue Ridge; and (9) WideOpenWest ("WOW"). However, it is not clear how the prices paid by a number of these MVPDs are an appropriate benchmark for estimating a price that an MVPD similar to Comcast would pay to carry the NFL Network on highly penetrated tiers:

- ***DIRECTV pays an allocated price, not a market price.*** The DIRECTV agreement is not an appropriate benchmark for calculating the Comcast price prediction because, in addition to carrying the NFL Network, DIRECTV distributes the NFL Sunday Ticket on an exclusive basis. The NFL Network and

¹⁵⁴ Comcast Ex. 85 ¶ 6.

the NFL Sunday Ticket distribution agreements are interconnected in such a way that it is effectively a bundled agreement. [REDACTED]

[REDACTED] Because DIRECTV's license fee used in Dr. Singer's regression analysis is an allocated, rather than a true market price, the fee is not an appropriate benchmark for the Comcast price prediction.

- **WOW does not carry the eight live NFL games.** WOW, an MVPD with only [REDACTED] subscribers,¹⁵⁶ carries the NFL Network but does not carry the NFL Network's eight live regular-season NFL games. Therefore, WOW's NFL Network license fee is not an appropriate benchmark for the Comcast price prediction for three reasons: (1) WOW is roughly [REDACTED] the size of Comcast in terms of the number of subscribers; (2) the WOW price does not include the surcharge for the eight live regular-season NFL games; and (3) WOW carries the NFL Network on a digital tier reaching less than half of its subscribers.¹⁵⁷
- **Cox does not carry the NFL Network on a highly penetrated tier.** Dr. Singer stated that he is seeking to find a price "consistent with the rates paid by other MVPDs that carry NFL Network on a highly penetrated tier."¹⁵⁸ But Cox only carries the NFL Network on its Sports and Information Tier, distributing the channel to approximately [REDACTED] of its subscribers.¹⁵⁹
- **Insight does not carry the NFL Network on a highly penetrated tier.** In its carriage agreement with the NFL Network, Insight agreed that the NFL Network would reach a minimum of [REDACTED] of total Insight subscribers or [REDACTED] of total digital subscribers.¹⁶⁰ Thus, the Insight affiliation agreement is not an appropriate benchmark for a carriage price on highly penetrated tiers.
- **RCN does not carry the NFL Network on a highly penetrated tier.** RCN's carriage agreement with the NFL Network commits it to provide the NFL Network to [REDACTED] of total digital subscribers.¹⁶¹ RCN distributes the NFL Network to only about [REDACTED] of its subscribers.¹⁶² Thus, the RCN affiliation agreement is not an appropriate benchmark for a carriage price on highly penetrated tiers.

¹⁵⁵ Comcast Ex. 156.

¹⁵⁶ See Comcast Ex. 166.

¹⁵⁷ Comcast Ex. 85 (Table 8 of the Singer Report reports that WOW has 169,554 NFL Network subscribers).

¹⁵⁸ Comcast Ex. 85 ¶ 6.

¹⁵⁹ Comcast Ex. 137.

¹⁶⁰ Comcast Ex. 178.

¹⁶¹ Comcast Ex. 179.

¹⁶² Comcast Ex. 137.

- ***Blue Ridge is a fraction of the size of Comcast.*** Blue Ridge is a small regional MVPD that serves five DMAs in Pennsylvania and has roughly [REDACTED] subscribers.¹⁶³ Thus, it is less than [REDACTED] percent of Comcast's size in terms of number of subscribers. Because of the vast differences in the sizes and coverage of Comcast and Blue Ridge, the Blue Ridge NFL Network affiliation agreement is not an appropriate benchmark for the Comcast price prediction.

111. The foregoing discussion explains why the affiliation agreements in Dr. Singer's sample do not provide relevant benchmark for calculating the Comcast price prediction.¹⁶⁴ In fact, Dr. Singer is forced to rely on these affiliation agreements because, as shown above, the largest cable companies have generally decided not to even carry the NFL Network at all. The absence of appropriate benchmarks suggests that any estimates of the Comcast price prediction are likely to be unreliable.

B. Dr. Singer's regression analysis of the "fair market value" is unreliable.

112. Dr. Singer calculates the Comcast price prediction by applying multivariate regression analysis to his sample of affiliation agreement.¹⁶⁵ However, his regression analysis suffers from at least three major flaws, each of which makes his analysis unreliable.

113. First, his analysis suffers from a sample selection bias. The analysis seeks to estimate the carriage price for distributing the NFL Network on highly penetrated tiers that would have been paid by an MVPD with similar characteristics as Comcast. However, the sample considered by Dr. Singer examines MVPDs that differ from

¹⁶³ See Comcast Ex. 166; see also Comcast Ex. 180.

¹⁶⁴ There are arguments for why the AT&T, Verizon, and Dish agreements are not appropriate benchmarks. For example, AT&T and Verizon are both significantly smaller than Comcast and do not face the same types of capacity constraints that Comcast faces on its analog expanded basic tier. Dish recently moved the NFL Network from its most highly penetrated tier, AT100, to a less penetrated tier, AT200.

¹⁶⁵ As discussed above, while price is a key component of the carriage terms, there are a number of other key carriage terms that Dr. Singer's analysis does not account for, such as video-on-demand rights.

Comcast in a key attribute: willingness to pay relatively high prices to carry the NFL Network.¹⁶⁶ Analyzing a sample consisting entirely of MVPDs with a relatively high willingness to pay to carry the NFL Network will generate *biased* estimates of what other MVPDs would pay to carry the NFL Network because the analysis will attribute the observed relatively high willingness to pay to other MVPDs not included in the sample.¹⁶⁷

114. To illustrate this same point, suppose two car buyers walk into a car dealership to buy the same make and model of car (e.g., a fully loaded Ford Escape Hybrid). If Person A reaches an agreement with the dealer and buys the car for \$35,000 and Person B offers \$30,000 and the dealer rejects it, Dr. Singer's analysis would suggest that Person B should pay \$35,000 for the car just because Person A did. As a matter of economic analysis, such an approach is flawed and necessarily overestimates the Comcast price prediction for carrying the network on highly penetrated tiers.

115. Second, the 39 "observations" in Dr. Singer's analysis are not independent of each other, which violates a basic assumption of the Ordinary Least Squares ("OLS") regression approach he uses. Dr. Singer estimates his results from *nine* affiliation agreements (as noted above, most, if not all, of these agreements are not appropriate benchmarks). Dr. Singer attempts to remedy his problem of having an extremely small

¹⁶⁶ The selection bias occurs because MVPDs with a relatively low willingness to pay for carriage of the NFL Network are less likely to reach an affiliation agreement with the NFL.

¹⁶⁷ A leading econometrics book provides a very apt example of this problem, "[O]bservations on hours worked are available only on those for whom their wage exceeds their reservation wage. The main problem here is that often the researcher wishes to draw conclusions about the wider population, not just the subpopulation from which the data is taken. If this is the case, to avoid sample selection bias estimation must take the sample selection phenomenon into account." Comcast Ex. 181 at 251 (Peter Kennedy, *A Guide to Econometrics*, Fourth Edition).

sample size by inflating artificially the number of observations. Dr. Singer expands the nine observations of affiliate agreements by considering the carriage price in each year of the affiliation agreement as an *independent* observation; in some years, he includes agreements twice, once before the eight-game surcharge and once after the eight-game surcharge. However, the carriage prices for different years within the same contract are not independent observations. An affiliation agreement provides a single measure of carriage costs, which are negotiated as a whole, whereas the allocation of the costs across the agreement years is often arbitrary. Dr. Singer's treatment of each contract year as an independent observation violates certain technical conditions that Dr. Singer's regression analysis relies on.¹⁶⁸

116. Another fundamental flaw in Dr. Singer's regression model is that his model confuses cause and effect. In such cases, the regression analysis can result in what is sometimes called "spurious correlation" or an endogeneity problem.¹⁶⁹ An example of spurious correlation would be an analysis that finds that hiring more policemen would increase crime based on the observation that cities with a relatively large number of

¹⁶⁸ Specifically, Dr. Singer's analysis assumes that there is no "serial correlation" across contract-years in the model's "residual" term. Statistical tests show that this assumption does not hold for Dr. Singer's sample. See Comcast Ex. 182 at 411-413 (William Greene, *Econometric Analysis*, Second Edition). If one makes the necessary corrections to Dr. Singer's analysis for just serial correlation, I find that the results of his model do not yield statistically significant (or reliable) results. For example, if I run Dr. Singer's model for just the 2008 average license fee observations, and omit the DIRECTV (since the price is not a true market price) and WOW (since it does not carry the eight live regular-season NFL games) observations, the estimated model coefficients become jointly statistically insignificant. If the model does not produce coefficients that are jointly statistically significant, the model cannot reliably be used to produce a Comcast price prediction.

¹⁶⁹ Comcast Ex. 143 at 184-185 (Daniel Rubinfeld (2000) "Reference Guide on Multiple Regression," in *Reference Manual on Scientific Evidence*, 2nd ed., Federal Judicial Center).

policemen tend to have more crime. Dr. Singer's regression analysis commits a similar error in using a model where a network's license fee for a given MVPD is a function of the network's penetration level for the MVPD.¹⁷⁰ In fact, MVPDs either *choose* the level of carriage for a network based on the network's license fee,¹⁷¹ or the license fee and the minimum required carriage level are determined simultaneously in negotiations.¹⁷² Similarly, the price may affect whether an MVPD seeks an MFN or chooses to take the eight-game package (*e.g.*, the example of WOW), rather than an MFN or the eight-game package affecting the price (as assumed by Dr. Singer). The presence of spurious correlation or endogeneity in the regression model will generally yield estimation results that are biased and unreliable.¹⁷³ Because, Dr. Singer's regression model almost certainly has some degree of spurious correlation and there is no way to correct for it given the limited number of observations, the findings of Dr. Singer's "fair market value" analysis are unreliable and should not be used as an estimate for the Comcast price prediction.

117. To show how deeply misguided Dr. Singer's regression analysis is and how unreliable it is at predicting the actual price paid by MVPDs, I conducted a simple test. This test examines how well Dr. Singer's methodology predicts prices for "out of sample" MVPDs—that is, MVPDs not included in the regression analysis data set (which is how Dr. Singer applies his analysis to predict Comcast's price). I use precisely the

¹⁷⁰ Comcast Ex. 85 ¶ 70.

¹⁷¹ Some affiliate agreements provide a list of license fee rates that the MVPD would pay depending on the penetration level, and where the MVPD chooses the penetrate level based on the license fee list.

¹⁷² That is, the choice of the license fee by the network affects carriage levels by MVPDs, and vice versa.

¹⁷³ See Comcast Ex. 183 at 359-60 (A.H. Studenmund and Henry J. Cassidy, *Using Econometrics: A Practical Guide*, pp. 359-60).

same model specification relied upon by Dr. Singer.¹⁷⁴ I withhold one MVPD from the regression analysis, and then use those model results to predict the price for the “withheld” MVPD. If his model were reliable, one would expect that the predicted price for the withheld MVPD would be reasonably close to the actual price paid by that MVPD. However, based on the confidence intervals calculated using Dr. Singer’s method, Dr. Singer’s method fails such a test for nearly half (4) of the nine MVPDs. For example, this approach predicts that Dish should be [REDACTED] (with a confidence interval of [REDACTED] to [REDACTED]), but Dish actually pays [REDACTED]. It also predicts a price for Cox of [REDACTED] (with a confidence interval of [REDACTED] to [REDACTED]), but Cox actually pays [REDACTED]. In other words, nearly half the time, the actual price paid by the MVPD is not within Dr. Singer’s confidence interval of the predicted price. Since Dr. Singer’s method does such a poor job predicting out-of-sample prices actually paid by MVPDs, there is no reasonable basis to conclude that it will do a reliable job for the Comcast price prediction.

VI. CONCLUSION

118. In this report, I describe my analysis of the NFL’s discrimination claims. I have shown that the claims made in the Carriage Complaint do not amount to discrimination on the basis of affiliation. Comcast’s decision to carry the NFL Network on its Sports Tier is consistent with rational business conduct based on considerations unrelated to the NFL Network’s affiliation, and the NFL’s claims are insufficient to demonstrate discrimination on the basis of affiliation. Of the seven largest cable companies (other than Comcast), six – Time Warner, Charter Communications, Cablevision, Bright House, Suddenlink, and Mediacom – do not carry the NFL Network

¹⁷⁴ My test is not an endorsement of Dr. Singer’s econometric approach. I use his model in my test in order to show the unreliability of his model.

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at all. Each of these seven cable companies carries both the Golf Channel and Versus. These carriage decisions are compelling evidence that Comcast did not discriminate against the NFL Network when it decided to carry the NFL Network on its Sports Tier; that is, these other large cable companies have decided, like Comcast, that the Golf Channel and Versus should be more widely distributed than the NFL Network.

119. The Carriage Complaint also fails to establish an economic basis for the claim that Comcast's decision to distribute the NFL Network on the Sports Tier has restrained unreasonably the NFL Network's ability to compete fairly against other networks. There is no valid basis to conclude that Comcast's carriage of the NFL Network on the Sports Tier reduced the NFL Network's subscribership below a minimum viable scale. The NFL Network's ability to constrain prices of competitors is likely unaffected by Comcast's decision to carry the network on the Sports Tier. Thus, there is no valid basis to conclude that Comcast's carriage of the NFL Network on the Sports Tier has in any way impaired the NFL Network's ability to compete against other networks for subscribers, carriage contracts, or advertising.

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Under penalty of perjury, I state that the foregoing is true and correct.



Jonathan Orszag

Dated: April 6, 2009